

WHAT IS CLAIMED IS:

1. A pharmaceutical composition administered to a subject in need thereof comprising an effective amount of a NMDA receptor antagonist and an effective amount of a preservative in a suitable carrier, wherein the composition does not cause any significant neurotoxicity.
2. The pharmaceutical composition of claim 1, wherein the preservative is selected from the group consisting of organic acids, esters thereof, and salts thereof.
3. The pharmaceutical composition of claim 2, wherein the organic acid, ester thereof, or salt thereof is selected from the group consisting of ascorbic acid, fumaric acid, malic acid, benzoic acid, sorbic acid, phenolic acid, ascorbic acid palmitate, sodium ascorbate, sodium benzoate, sodium propionate, potassium sorbate, and propyl gallate.
4. The pharmaceutical composition of claim 1, wherein the preservative is selected from the group consisting of alcohols, polyols, and phenols.
5. The pharmaceutical composition of claim 4, wherein the alcohol, polyol, or phenol is selected from the group consisting of benzyl alcohol, isopropyl alcohol, phenylethyl alcohol, phenoxyethanol, chlorobutanol, propylene glycol, glycerol, phenol, butylated hydroxyanisole, and bronopol.
6. The pharmaceutical composition of claim 1, wherein the preservative is an alkyl paraben.
7. The pharmaceutical composition of claim 6, wherein the alkyl paraben is selected from the group consisting of methylparaben, ethylparaben, propylparaben, and butylparaben.

8. The pharmaceutical composition of claim 1, wherein the preservative is a cresol.
9. The pharmaceutical composition of 8, wherein the cresol is selected from the group consisting of chlorcresol and cresol.
10. The pharmaceutical composition of claim 1, wherein the preservative is selected from the group consisting of benzalkonium chloride, chlorhexidine, imidurea, alpha tocopherol, and EDTA.
11. The pharmaceutical composition of claim 1 wherein the NMDA receptor antagonist is ketamine.
12. The pharmaceutical composition of claim 11, wherein the dosage range of ketamine for anesthesia is broadly from about 1 mg/kg to about 15 mg/kg per unit dose.
13. The pharmaceutical composition of claim 11, wherein the dosage range of ketamine for anesthesia is preferably from about 1.0 mg/kg to about 4.5 mg/kg per unit dose delivered I.V. and 6.5 mg/kg to about 13 mg/kg via intramuscular injection.
14. The pharmaceutical composition of claim 11, wherein the dosage range of ketamine for analgesia is broadly from about 0.01 mg/kg to about 1 mg/kg per unit dose.
15. The pharmaceutical composition of claim 11, wherein the dosage range of ketamine for analgesia is preferably from about 0.05 mg/kg to about 0.7 mg/kg per unit dose.
16. The pharmaceutical composition of claim 11, wherein the dosage of ketamine is about 10 mg per unit 100 microliter dose.
17. The pharmaceutical composition of claim 1 wherein the preservative is benzalkonium chloride.

18. The pharmaceutical composition of claim 17, wherein the amount of the benzalkonium chloride is from about 0.001% to about 0.2% per unit dose.
19. The pharmaceutical composition of claim 17, wherein the amount of the benzalkonium chloride is from about 0.07% to about 0.14% per unit dose.
20. The pharmaceutical composition of claim 17, wherein the amount of the benzalkonium chloride is about 0.002%.
21. The pharmaceutical composition of claim 1 wherein the suitable carrier is an aqueous solution selected from the group consisting of water, saline, bicarbonate, sucrose and any mixture of the above components.
22. A pharmaceutical composition which comprises an aqueous solution containing about 10% ketamine hydrochloride and about 0.002% benzalkonium chloride.
23. A pharmaceutical composition which comprises an aqueous solution containing about 10% ketamine hydrochloride and about 0.002% benzyl alcohol.
24. A pharmaceutical composition which comprises an aqueous solution containing about 10% ketamine hydrochloride and about 0.002% phenol.
25. A method of inducing analgesia in a subject, which method comprises: administering to the subject a pharmaceutical composition comprising an analgesically effective amount of ketamine and benzalkonium chloride in a suitable carrier.
26. The method of claim 25 wherein the mode of administration is parenteral.
27. The method of claim 26 wherein the parenteral administration is selected from the group comprising intravenous, intrathecal, intramuscular, and subcutaneous.
28. The method of claim 25 wherein the mode of administration is intranasal, oral, transmucosal, transdermal, rectal, or intraocular.

29. The method of claim 25, wherein the composition is administered to a subject suffering from breakthrough episodes of moderate to severe pain.

30. A method of inducing analgesia in a subject, which method comprises: administering to the subject a pharmaceutical composition comprising an analgesically effective amount of ketamine and benzyl alcohol in a suitable carrier.

31. A method of inducing analgesia in a subject, which method comprises: administering to the subject a pharmaceutical composition comprising an analgesically effective amount of ketamine and phenol in a suitable carrier.

32. A method of inducing analgesia in a subject, which method comprises: administering to the subject a pharmaceutical composition comprising an anesthetically effective amount of ketamine and benzalkonium chloride in a suitable carrier.

33. The method of claim 32 wherein the mode of administration is parenteral.

34. The method of claim 33 wherein the parenteral administration is selected from the group comprising intravenous, intrathecal, intramuscular, and subcutaneous.

35. The method of claim 32 wherein the mode of administration is intranasal, oral, transmucosal, transdermal, rectal, or intraocular.

36. The method of claim 32, wherein the composition is administered to a subject suffering from moderate to severe pain.

37. The method of claim 32, wherein the composition is administered to a subject suffering from acute episodic or breakthrough pain.

38. A method of inducing analgesia in a subject, which method comprises: administering to the subject a pharmaceutical composition comprising an anesthetically effective amount of ketamine and benzyl alcohol in a suitable carrier.

39. A method of inducing analgesia in a subject, which method comprises:
administering to the subject a pharmaceutical composition comprising an anesthetically effective
amount of ketamine and phenol in a suitable carrier

40. The pharmaceutical composition of claim 1, wherein the subject is a
mammal.

41. The pharmaceutical composition of claim 1, wherein the subject is a
human.